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| 10/582,434      | 06/09/2006  | Li Yadong            | D8888.0001          | 4874             |

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DICKSTEIN SHAPIRO LLP  
1177 AVENUE OF THE AMERICAS (6TH AVENUE)  
NEW YORK, NY 10036-2714

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| EXAMINER |
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FONSECA, JESSIE T

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| ART UNIT | PAPER NUMBER |
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3633

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10/14/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                   |  |
|------------------------------|--------------------------------------|-----------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/582,434 | <b>Applicant(s)</b><br>YADONG, LI |  |
|                              | <b>Examiner</b><br>JESSIE FONSECA    | <b>Art Unit</b><br>3633           |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/23/07</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Drawings***

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective

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action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claim 1 and 4 are objected to because of the following informalities:

Claim 1 (line 4-5): The limitation "the upper and lower side walls of the slot mortise being respectively short and long ends" is awkwardly worded. It appears applicant is referencing the upper side wall having a short end and the lower side having a long end?

Claim 4 (lines 1): The preamble of the claim is different from that of independent claim 1, Examiner suggests replacing "flooring" with --floorboard piece--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 (line 13): Examiner fails to see the significance of the limitation "lower side wall" being placed in parenthesis. Parentheses are typically used to further describe/define the preceding element. In this case, the lower side wall is not further

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defining the long end. As such, the claim is indefinite as its unclear if the limitation of the lower side wall is positively recited or not. Claims are examined as best understood.

Claim 1 (lines 13-14): It's unclear how the long end of the slot mortise engages with the anti-self-locking oblique surface as the claims only recite one floorboard. It appears the claim should recite the long end being capable of engaging an anti-self-locking oblique surface of another floorboard? Claim is examined as best understood.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriau et al. (US 6,490,836).

With regards to claim 1: Moriau et al. discloses a flat clasping floorboard piece (1), which has an elongated strip shapes (figs. 22-23); a slot mortise (10) being formed along one of the long sides of the floorboard piece, while a tenon (9) is provided along the other long side; the short sides of the floor board piece being also provided with a slot mortise (10) and a tenon (9) (figs. 22-23). Note Moriau et al. discloses the slot mortise (10) and tenon (9) are applied along the long (longitudinal) sides of panel, in addition to the other two sides (short sides) (col. 3, lines 23-29).

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Moriau et al. further discloses the slot mortise (10) having a short end side wall (M) and an long end side wall (N); the upper surface of the slot mortise (10) being parallel to and having the same height with the upper surface of the tenon (9); characterized in that a V-shaped groove is provided in the lower surface of the slot mortise (10) and a corresponding convexity being provided on the lower surface of the tenon (9); the convexity, in the insertion direction of the tenon (9), has an anti-self-locking oblique surface (O) formed on its front end; the oblique surface (O) forms a first angle with the upper surface of the floorboard strip (1); a corresponding oblique surface (83) is formed on the external surface on the long end (lower side wall) of the slot mortise (10) to engage with the anti-self-locking oblique surface (O) (figs. 23-25); the rear end of the convexity matches perfectly with the external side surface of the V-shaped groove to form a self-locking surface, which forms a second angle with the upper surface of the strip; the second angle (A) ranges from 30-70°; and the external shape of the tenon (9) corresponds with the shape of the slot mortise (10) (fig. 23) (col. 10, lines 28-36).

Moriau et al. discloses the oblique surface (O) forms a first angle with the upper surface of the floorboard strip (1), but fails to disclose the first angle ranging from 15-35°.

However, Moriau et al. appears to disclose a first angle between 15-35°. Note the first angle is smaller to that of the second angle (A) which is disclosed to be in the range of 30-70°. Moriau et al. discloses the oblique surface (O) and corresponding

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oblique surface (83) are angled to provide a smooth shifting of locking elements over one another (col. 12, lines 24-28),

Given the disclosure of Moriau et al., it would have been obvious matter of design choice to one of ordinary skill in the art at the time of the invention was made to have a first angle between 15-35° so as to provide a smooth shifting of locking elements over one another for ease of installation. No new or unpredictable results would be expected from having a first angle 15-35° as one of ordinary skill in the art would have discovered the optimum and workable ranges through routine experimentation. The floorboard piece of Moriau et al., which discloses the general conditions and structure of the claimed floorboard would be expected to perform equally well to that of applicants.

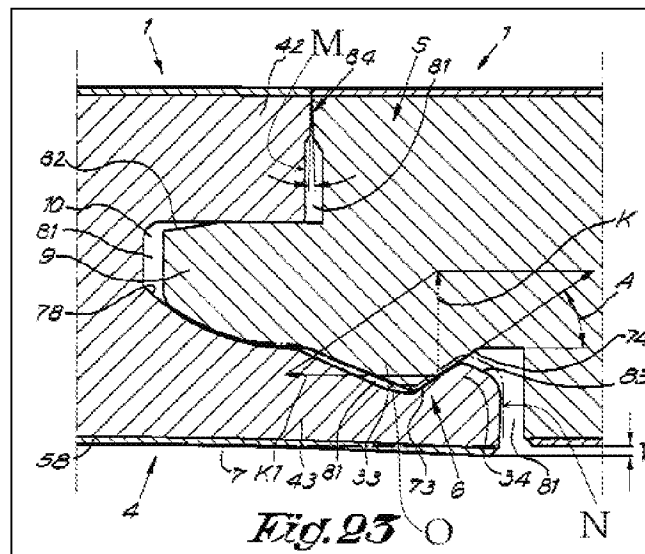


Fig. 23: Moriau et al. (US 6,490,836)

With regards to claim 2: Moriau et al. discloses everything previously mentioned, including the long end side wall of the slot mortise (10) being longer than the short end

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sidewall, but fails to disclose the long end side wall is 2-4mm longer than the short end wall.

However, it would have been an obvious matter of design choice to one of ordinary skill in the art at the time of the invention was made to discover the optimum or workable ranges necessary to provide a floorboard structure that is stable and safe when joined to similar floorboard structures, no new or unpredictable results would be expected from such a configuration. The floorboard of Moriau et al. would be expected to perform equally well to that of applicant's.

With regards to claim 3: Moriau et al. further discloses a plurality of strips, characterized in that the tenon (9) on one strip is inserted into the slot mortise (10) in another strip to form a floor surface (figs. 23 & 25; col. 2, lines 3-8 & lines 17-25).

With regards to claim 4: Moriau et al. further discloses that the tenons (9) and slot mortises (10) formed along the long short sides of different strips are assembled with one another (figs. 23 & 25; col. 2, lines 3-8 & lines 17-25; and col. 3, lines 23-30).

With regards to claim 5: Moriau et al. further discloses a plurality of strips, characterized in that the tenon (9) on one strip is inserted into the slot mortise (10) in another strip to form a floor surface (figs. 23 & 25; col. 2, lines 3-8 & lines 17-25; and col. 3, lines 23-30).

### ***Conclusion***



The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art made of record is directed to floorboard structures connected to another one another via a slot mortise and tenon mechanism.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSIE FONSECA whose telephone number is (571)272-7195. The examiner can normally be reached on M-F 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Canfield can be reached on (571)272-6840. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. F./  
Examiner, Art Unit 3633

/Robert J Canfield/

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Supervisory Patent Examiner, Art Unit 3635